

CLAIMS

What is claimed is:

1. A self-contained, temperature-change container assembly comprising:
an inner container;
an outer jacket at least partially surrounding the inner container, wherein a first internal volume and a second internal volume are defined between the inner container and the outer jacket;
a first temperature-change reagent inside the first internal volume;
a second temperature-change reagent inside the second internal volume;
a reagent separator between the first internal volume and the second internal volume;
a movable member situated opposite the reagent separator;
wherein movement of the movable member opens the reagent separator to allow mixing of the first and second temperature-change reagents in a reagent mixing region inside the outer jacket; and
a heat insulator inside the outer jacket between the outer jacket and the reagent mixing region.
2. The assembly of claim 1, wherein the heat insulator comprises paper inside the outer jacket.
3. The assembly of claim 1, and further comprising structure defining air spaces within the material of the outer jacket.
4. The assembly of claim 3, wherein the structure defining air spaces within the material of the outer jacket includes substantially concentric layers separated from one another by ribs between the layers.

5. The assembly of claim 1, wherein the heat insulator comprises a compressed fibrous material.

6. The assembly of claim 1, and further comprising a second heat insulator outside of the outer jacket.

7. The assembly of claim 6, wherein the second heat insulator includes a polymeric material.

8. The assembly of claim 7, wherein the polymeric material comprises an expanded polystyrene foam.

9. The assembly of claim 6, and further comprising a third heat insulator between the outer jacket and the second heat insulator.

10. The assembly of claim 9, wherein the third heat insulator comprises corrugated cardboard and the second heat insulator comprises a polymeric material outside of the corrugated cardboard.

11. The assembly of claim 10, wherein the polymeric material comprises expanded polystyrene foam.

12. A self-contained, temperature-change container assembly comprising:
an inner container;
an outer jacket at least partially surrounding the inner container, wherein a first internal volume and a second internal volume are defined between the inner container and the outer jacket;
a first temperature-change reagent inside the first internal volume;
a second temperature-change reagent inside the second internal volume;

a reagent separator between the first internal volume and the second internal volume;

a movable member situated opposite the reagent separator;

wherein movement of the movable member opens the reagent separator to allow mixing of the first and second temperature-change reagents in a reagent mixing region inside the outer jacket; and

wherein the outer jacket includes structure defining air spaces within the material of the outer jacket.

13. The assembly of claim 12, and further comprising an inner heat insulator inside the outer jacket between the outer jacket and the reagent mixing region.

14. The assembly of claim 13, wherein the inner heat insulator comprises paper inside the outer jacket.

15. The assembly of claim 13, wherein the inner heat insulator comprises a compressed fibrous material.

16. The assembly of claim 13, and further comprising an outer heat insulator outside of the outer jacket.

17. The assembly of claim 16, wherein the second heat insulator includes a polymeric material.

18. The assembly of claim 17, wherein the polymeric material comprises an expanded polystyrene foam.

19. The assembly of claim 16, and further comprising an intermediate heat insulator between the outer jacket and the outer heat insulator.

20. The assembly of claim 19, wherein the intermediate heat insulator comprises corrugated cardboard and the second heat insulator comprises a polymeric material outside of the corrugated cardboard.

21. The assembly of claim 20, wherein the polymeric material comprises expanded polystyrene foam.

22. The assembly of claim 12, wherein the structure defining air spaces within the material of the outer jacket includes substantially concentric layers separated from one another by ribs between the layers.